REMARKS

Reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1, 2 and 4-20 remain pending in the application.

Claims 1-2 and 4-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. In response, claims 1, 4 and 9-13 have been amended as discussed below.

Specifically, Na refers to a division rank of the variable-step synthesizer. The cycle of evolution refers stepping through a sequence N1...Np. Claim 1 has been amended so that the different elements are connected to each other receive or deliver different signals. The specification has been amended to connect together the inputs and outputs of elements 10, 11, 12. Claim 9 has been amended to be consistent with the term used in the specification. Claim 10 is believed to be definite as no structure is required for performing a method. The cycle of evolution of Na and how it is dependent on Nb is discussed in the specification on page 6, lines 1-32. Claim 10 appears to be directed to the embodiment illustrated in Figure 5. With respect to claim 18, an example is discussed in the specification on page 6, lines 21-32. Regarding the term LCM in claim 20, LCM stands for Least Common Multiple, which is a commonly used term in the art. Accordingly, the indefiniteness rejection should be withdrawn.

Claims 10-11 and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Petersson et al. (U.S. 5,140,284). Applicants respectfully traverse this rejection.

The main technical difference between the teaching of <u>Petersson</u> and the present invention is in <u>Petersson</u>, N varies according to the value of Fout (frequency obtained). To a given value of Fout, there s only one value for P, only one value of N, except for the value of frequency of frontier. In <u>Petersson</u>, N does not vary with time.

In the present invention, for a given value of Fout, Nb is chosen and Na (N in <u>Petersson</u>) varies according to the following rules: page 6, lines 14-17 of the present invention "in the device according to the invention, the length of the cycle evolution of Na is variable and dependent on the value of Nb. In the present invention, the value of Na is a fraction value comprising an integer part and a fractional part. Accordingly, the anticipation rejection should be withdrawn.

Claims 1-2, 4-9, 12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable

Application No.: 10/722,593 Docket No.: 4590-242

over <u>Petersson et al.</u> in view of Figure 2 of the Applicants' prior art and further in view of <u>Dekker</u> (U.S. 6,239,660). Applicants respectfully traverse this rejection.

Applicants admitted prior art and <u>Dekker</u> does not overcome the deficiencies discussed above with respect to <u>Petersson et al.</u> Accordingly, this rejection should be withdrawn.

All objections and rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

LOWE HAUPTMAN & BERNER, LLP

mneth Ey. Berner

Kenneth M. Berner

Registration No. 37,093

Customer Number: 33308 1700 Diagonal Road, Suite 300 Alexandria, Virginia 22314 (703) 684-1111 (703) 518-5499 Facsimile Date: May 1, 2006

KMB/jd